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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/018,976	03/14/2002	Manfred Kogler	1406/34	. 3027	
25297 IENKING V	7590 11/06/2007 711 SON TAVIOR & HII	EXAMINER			
JENKINS, WILSON, TAYLOR & HUNT, P. A. 3100 TOWER BLVD., Suite 1200 DURHAM, NC 27707			GHULAMALI, QUTBUDDIN		
			ART UNIT	PAPER NUMBER	
		2611			
			·		
			MAIL DATE	DELIVERY MODE	
			11/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	No.	Applicant(s)			
Office Action Summary		10/018,976		KOGLER, MANFRED			
		Examiner		Art Unit			
		Qutub Ghulai	mali	2611			
Period fo	- The MAILING DATE of this communication r Reply	appears on the co	over sheet with the c	orrespondence ad	dress		
WHIC - Exten after: - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOR RE HEVER IS LONGER, FROM THE MAILING usions of time may be available under the provisions of 37 CF SIX (8) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory put e to reply within the set or extended period for reply will, by seply received by the Office later than three months after the red patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS FR 1.136(a). In no event, n. eriod will apply and will ex statute, cause the applicat	COMMÚNICATION however, may a reply be tim spire SIX (6) MONTHS from tion to become ABANDONE	l. ely filed the malling date of this co D (35 U.S.C. § 133).			
Status	•			•			
1) 🔯	Responsive to communication(s) filed on 2	20 August 2007.	,				
•	This action is FINAL. 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice und	der <i>Ex par</i> te Quay	le, 1935 C.D. 11, 45	33 O.G. 213.			
Dispositi	on of Claims						
4)⊠	Claim(s) 1-9 is/are pending in the application	ion.	•		•		
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
	Claim(s) <u>1-9</u> is/are rejected.						
	Claim(s) is/are objected to.						
8)[]	Claim(s) are subject to restriction a	ind/or election req	uirement.				
Applicati	on Papers						
9)	The specification is objected to by the Exa	miner.					
10)	The drawing(s) filed on is/are: a)		•				
	Applicant may not request that any objection to						
445	Replacement drawing sheet(s) including the co						
11)[_]	The oath or declaration is objected to by the	ne Examiner. Note	the attached Office	Action or form P	10-152.		
Priority L	ınder 35 U.S.C. § 119	•		•			
•—	Acknowledgment is made of a claim for for All b) Some * c) None of:	reign priority unde	r 35 U.S.C. § 119(a)	)-(d) or (f).			
	1. Certified copies of the priority docur	ments have been	received.				
	2. Certified copies of the priority documents	ments have been	received in Applicati	on No			
	3. Copies of the certified copies of the	•		ed in this National	Stage		
	application from the International Bo	•					
* (	See the attached detailed Office action for a	a list of the certifie	o copies not receive	ed.			
Attachmen	ut(s)						
	ce of References Cited (PTO-892)	4	) 🔲 Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date.  5) Notice of Informal Patent Application							
	er No(s)/Mail Date		Other:				

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#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/21/2007 has been entered.

## Response to Remarks/Amendments

- 2. Applicant's request for consideration of amendment, pages 3-4, filed 08/21/2007, with respect to the rejection of claim(s) 1-9, under 35 U.S.C 103(a) have been fully considered and after a further search and examination claims 1-9 now indicated allowable. However, in order advance prosecution in the case an examiner's amendment was considered necessary so as to correct for some minor deficiency in the claim 1 noted here under.
- 3. Applicant's arguments, see page 4-9, filed 08/21/2007, with respect to the rejection(s) of claim(s) 1-9 under 35 U.S.C 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, the amended claim 1 and dependent claims 2-9, upon further consideration, are rejected based on new

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ground(s) of rejection made in view of new art to Anne. The rejection based on the new art follows:

### Claim Objections

4. Claim 1 is objected to because of the following informalities:

Claim 1, line 3, after "codec circuit to a transmitted" the acronym "PCM" needs to be replaced with -- Pulse Code Modulation (PCM) --.

Claim 1, line 5, after "device configured to identify" the word "the" needs to be replaced with -- a --.

Appropriate correction is required.

Note: The above corrections were discussed with the applicant's representative, Mr. David Sigmon, on 9/14/2007.

# Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anne et al (US Patent 6,744,812).

Regarding claim 1, Anne discloses a codec circuit, a programmable (tunable) digital bandpass filter, for providing filter characteristics (col. 16, lines 11-24, 35-40) of

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the codec circuit to a transmitted PCM signal (col. 4, lines 50-65), a signal identification device configured to identify a type of modulation and transmission speed of a transmitted PCM signal and configured to set filter coefficients for the at least one programmable digital high pass filter and the at least one programmable digital low pass filter based on the identified modulation type and transmission speed (or transmission rate) of the transmitted signal (for example in a V.90 the sample rate preferably is 8 kHz) (col. 5, lines 1-20, 25-40; col. 11, lines 1-15; col. 16, lines 11-24, 35-40; col. 21, lines 11-15). Anne however, does not show use of filter labels as low pass and high pass filter, however, as understood by the examiner, and as illustrated in fig. 2, (see also col. 21, lines 11-24) the filter bank (204) includes filters, at least one digital high pass filter and at least one digital low pass filter and regarded as connected in series electrically and as disclosed by Anne these filters may be tunable (or programmable) if desired (col. 10, lines 66-67; col. 11, lines 1-15; col. 21, lines 12-24) as would be obvious to a person of skill in the art at the time the invention was made to utilize, to arrive at the same or similar results, for achieving the desired filter characteristics once the modulation mode or type is recognized because once the modulation technique is selected, the modulation selection routine 432 determines which region in the lookup table 400 holds the waveform samples for the selected modulation scheme, the modulation and filtering routine 428 then creates an outgoing digital signal based on data received through the mac port 424 by selecting waveform samples and bandpass filters the modulated data prior to transmitting through the codec).

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Regarding claim 2, Anne discloses setting filter coefficients are stored in coefficient memory devices, which are associated with the programmable digital high-pass and low-pass filters (col. 10, lines 8-54).

Regarding claim 3, Chung discloses the memory devices can be in the form of a random access memory (RAM) (col. 10, lines 24-29).

Regarding claim 4, Chung discloses memory devices are connected via coefficient setting lines to the signal identification device (fig. 4, elements 220, 400, 424).

Regarding claim 5, Anne discloses programmable digital filters can be set to a 3<sup>rd</sup> to 5<sup>th</sup> order and if desired can be designed to a seventh-order, since Anne discloses that these filters are tunable (col. 21, lines 5-15).

Regarding claims 6, Anne discloses upper and lower signal transmission cut-off frequencies can be set by means of filter settings (shows filter roll-off below 4MHz and above 8 MHz (col. 16, lines 21-24, 35-40).

Regarding claims 7 and 8, Anne discloses lower and upper signal transmission cut-off frequency can be set as part of the filter characteristic desired in bandpass filtering (col. 21, lines 5-24).

As to claim 9, Anne discloses filter to compensate for ripple in the passband filter (col. 21, lines 24-30; col. 22, lines 6-12).

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#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**US Patents:** 

US Patent (6,504,865) to Liang et al.

US Patent (5,566,088) to Herscher et al.

US Patent (5,960,035) to Sridhar et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (571) 272-3014. The examiner can normally be reached on Monday-Friday, 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QG. September 28, 2007.

CHIEH M. FAN

SUPERVISORY PATENT EXAMINER